Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 101 of the Commission's Rules to Facilitate the Use of Microwave for Wireless Backhaul and Other Uses and to Provide Additional Flexibility to Broadcast Auxiliary Services and Operational Fixed Microwave Licensees	)	WT Docket 10-153
Request for Interpretation of Section 101.141(a)(3) of the Commission's Rules Filed by Alcatel-Lucent, Inc., et al	)	WT Docket 09-106
Petition for Declaratory Ruling Filed by Wireless Strategies, Inc.	)	WT Docket 07-121
Request for Temporary Waiver of Section 101.141(a)(3) of the Commission's Rules Filed by Fixed Wireless Communications Coalition	)	RM-11417

To: The Commission

Comments of EIBASS

Engineers for the Integrity of Broadcast Auxiliary Services Spectrum (EIBASS) hereby respectfully submits its comments in the above-captioned Notice of Proposed Rulemaking (NPRM) and Notice of Inquiry (NOI) relating to flexibility for Part 74 Broadcast Auxiliary Services (BAS) stations, and other issues.

I. Removing the "Last Link" Restriction is a Fair Exchange for Allowing POFS Access to 7 and 13 TV BAS Bands Only if POFS Stations Must Additionally Protect ENG-RO Sites

1. EIBASS has no objection to allowing Private Operational Fixed Service (POFS) licensees access to the 7 and 13 GHz TV BAS bands (but not the 2 GHz or 2.5 GHz TV BAS bands), in exchange for deleting Section 101.603(a)(7) of the FCC Rules, which prohibits below-21.2 GHz POFS links from being the final RF link in the chain of distribution of the program material to broadcast stations, so long as newcomer POFS stations are additionally required to protect any

electronic news gathering receive-only (ENG-RO) sites that are used by TV Pickup stations in the 7 or 13 GHz TV BAS bands.[1] As the NPRM notes, this could impact mobile TV Pickup operations, such as ENG. The NPRM thus proposes to address this potential problem by requiring the licensing of 7 GHz ENG-RO sites.

2. This proposal raises several issues: First, per Section 74.604(c) of the FCC rules, TV Pickup operations are secondary to fixed-link TV studio-to-transmitter (STL) and Inter City Relay (ICR) stations. As a result, broadcasters in many markets have voluntarily migrated their 2 GHz fixed-link TV BAS stations to higher bands, and have refrained from licensing new fixed-link stations in the 2 GHz band, so as to make more 2 GHz spectrum available for ENG operations. In some markets, portions of the 7 GHz TV BAS band have similarly been voluntarily reserved for TV Pickup operations. Chicago, Houston, Los Angeles, New York City, Phoenix, San Francisco and Washington DC are all examples of markets with 7 GHz ENG operations.

3. Second, even for the 2 GHz TV BAS band, the protection of fixed receive sites, by means of modifying the TV Pickup license to show the location(s) and height(s) of fixed ENG-RO sites, has been voluntary, not mandatory. While EIBASS believes that any TV Pickup licensee with ENG-RO sites that fails to show the location(s) and height(s) of its fixed receive sites is inviting future interference as well as chaos for themselves and other licensees, we see no need to make the licensing of 7 GHz ENG-RO sites mandatory, because TV Pickup licensees will have a strong incentive to do so on their own. Thus, EIBASS suggests that the Commission instead encourage the voluntary licensing of all fixed ENG-RO sites, regardless of band. And, once so licensed, newcomer POFS licensees would have to demonstrate protection of those fixed ENG-RO sites, in addition, of course, to demonstrating protection of all existing fixed-link STL, ICR and TV Translator Relay stations. EIBASS notes that in addition to fixed ENG-RO sites, TV Pickup stations also use portable and mobile receive sites. For example, coverage of major sporting events often involves use of portable receive sites, especially for physically large venues such as racetracks and temporary racing circuits. Airborne relays in helicopters are examples of mobile TV BAS receive sites.

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[1] Section 101.603(a)(2) exempts POFS stations above 21.2 GHz from this restriction. TV BAS licensees already have access to 6,425–6,525 MHz and to TV BAS frequencies at 18 GHz. Also, and as specified in Section 74.402(a), Note 2, of the FCC rules, within a 50-km radius of the top-100 TV markets, TV BAS Channels B18, A19, B19, A20 and B20 are reserved for mobile-only operations, and thus this portion of the 13 GHz TV BAS band would not be available to fixed POFS stations.

4. While fixed ENG-RO sites are extensively used by broadcasters in the 2 and 2.5 GHz bands, and, to a lesser extent, the 7 GHz TV BAS band, in the 13 GHz TV BAS band the TV Pickup use is mostly to temporary receiving locations, although some markets also use fixed ENG-RO sites even in the 13 GHz TV BAS band.[2] With careful real-time and cooperative frequency coordination, broadcasters have often been able to "work around" the higher-priority fixed 13 GHz TV BAS links. Opening the 13 GHz TV BAS band to POFS would make this more difficult. Although fixed ENG-RO sites for 13 GHz TV BAS operations are not as common as 2, 2.5, 6.5 and 7 GHz ENG-RO sites, EIBASS nevertheless proposes that 13 GHz TV Pickup stations be allowed to add fixed ENG-RO sites to their TV Pickup licenses, as well.

5. EIBASS proposes that the addition of a fixed ENG-RO site (or sites) to a TV Pickup license would not create any retroactive protection rights for any existing fixed-link POFS stations. That is, a POFS station entering the 7 or 13 GHz TV BAS bands would only have to demonstrate protection of existing co-channel or adjacent-channel fixed ENG-RO sites; fixed ENG-RO sites added after the licensing of a POFS station in the 7 or 13 GHz TV BAS bands would not be entitled to protection from an earlier-in-time POFS path. However, if the POFS station were to apply for a major-change modification, it should then be obligated to demonstrate protection of all co-channel or adjacent-channel fixed ENG-RO sites of record at the time.

6. This proposed protection of fixed ENG-RO sites should not, however, extend to TV BAS fixed-link stations. As noted above, fixed-link stations have a higher priority of use than TV Pickup stations. The reason for this proposed different treatment is that EIBASS believes it best to continue the current informal agreement between broadcasters to minimize the number of fixed links at 2 GHz, and, in some cases, also informally reserve portions of the 7 or 13 GHz TV BAS bands for mobile operations, often with the assistance of local BAS coordinating committees. Broadcasters have an incentive for mutually agreed-to shared coordination,

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[2] Such use was well documented in the September 29, 2010, *ex parte* filing to WT Docket 10-153 by the National Association of Broadcasters (NAB). That filing documented a September 28, 2010, meeting at the offices of a Washington, DC, law firm and attended by FCC representatives from the Media Bureau (MB), the Wireless Telecommunications Bureau (WTB), and the Office of Engineering and Technology (OET). This meeting demonstrated the extensive use of TV BAS frequencies in the Washington, DC/Baltimore, MD, area. EIBASS has learned that this includes 13 GHz capable fixed ENG-RO sites on the WJLA tower (using a remotely controlled, steerable receiving dish) and multiple fixed-direction horn antennas in the tower openings of the Old Post Office Building at 12th Street and Pennsylvania Avenue NW in Washington, DC, plus three other fixed locations, for a total of five 13-GHz capable fixed ENG-RO sites. Further, EIBASS has reason to believe that a sixth 13 GHz-capable fixed ENG-RO site will soon be added, all of which will belong to a single TV Pickup station licensee. Of course, there are multiple other TV Pickup station licensees in the Washington, DC metro, and some of these licensees undoubtedly also have ENG-RO sites that have capabilities in the 7 and 13 GHz TV BAS bands, in addition to the 2, 2.5 and 6.5 GHz TV BAS bands.

whereas POFS licensees entering the 7 and 13 GHz TV BAS bands would not. Thus, EIBASS is intentionally proposing different treatment of ENG-RO sites depending on whether a newcomer is a Part 74 fixed-link station, or a Part 101 POFS station.

7. EIBASS proposes that the protection criteria for a fixed ENG-RO site be the same criteria adopted by the FCC in the October 21, 2004, ET Docket 00-258 *Seventh Report and Order* (R&O) for Department of Defense (DoD) uplinks sharing the 2,025–2,110 MHz TV BAS band: Namely, no more than a 0.5 dB degradation in the noise threshold of the receiver at the fixed ENG-RO site.[3] This is also the protection criteria adopted in the April 30, 2009, *SBE-DoD Memorandum of Understanding* (MOU).[4]

8. It would be necessary to allow a reasonable time period for 7 GHz TV Pickup station licensees to modify their licenses to reflect their other than 2/2.5 GHz fixed ENG-RO sites.[5] EIBASS suggests a 90-day period from the date the R&O is published in the Federal Register. Section 101.l03(d) Prior Coordination Notice (PCN) studies for POFS stations proposing to enter the 7 GHz TV BAS band should not be allowed to commence until after this period.

9. Since EIBASS is not aware of any similar use of mobile microwave stations and systems utilizing high-elevation receive-only sites with either omnidirectional or directional but remotely steerable receiving antennas, supported by either ICR or fiber optic back hauls to a TV station's studio, there is no need for a reciprocal obligation for TV BAS links entering the 6 or 11 GHz POFS bands. That is, it would be sufficient for newcomer TV BAS links to demonstrate protection of existing POFS paths in those bands in accordance with the well-established PCN protocol.

10. Finally, EIBASS notes that if the Commission acts favorably on RM-11605, a Petition for Rulemaking filed by the Fixed Wireless Communications Council (FWCC) that proposes to open up the federal government 7,125–8,500 MHz band to POFS for backhaul links in support

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3 At Paragraph 29, Footnote 63.

4 See http://www.eibass.org/images/filings/eibass sbe-dod mou cover.pdf

5 EIBASS notes that on April 16, 2008, the Commission issued a public notice (PN), *Licensees of Television Pickup Stations Now Have the Option to Identify Their Stationary, Receive-Only Sites on ULS To Aid Coordination With Other Services*. This PN was in response to an SBE Petition for Rulemaking, RM-11308. The PN notified TV Pickup licensees of the option to add ENG-RO sites to their TV Pickup station licenses so that other parties with an obligation to protect such operations, such as DoD, Advanced Wireless Services (AWS) licensees at 2,110-2,155 MHz, and Ancillary Terrestrial Component (ATC) Mobile Satellite Service (MSS) licensees at 2,487.5–2,493 MHz, would then be able to use the ULS database to locate and identify ENG-RO sites (as required by Section 27.1133 of the FCC rules). However, the PN only applied to 2 and 2.5 GHz TV Pickup stations, not to 7 or 13 GHz band TV Pickup stations.

of the National Broadband Plan (General Docket 09-51), operations in the bottom 100 MHz of that band should also have an obligation to protect any nearby 7 GHz fixed ENG-RO sites.[6]

II. Elimination of the "Final Link" Rule Would Appear To Allow Aural BAS To Access the Lower 900 MHz POFS Bands

11. Although this rule making primarily addresses the 7 and 13 GHz TV BAS bands, EIBASS notes that if Section 101.603(a)(7) of the Part 101 rules is deleted, then it would appear that Part 74, Subpart E, Aural BAS licensees would be free to apply for links in the 932.5–935 MHz and 941.5–944 MHz POFS bands. In the largest radio station markets it is difficult to find spectrum for new links in the current 944.0–952.0 Aural BAS band. EIBASS asks the Commission to confirm this understanding of the NPRM. In that event, EIBASS notes that the lower frequency limit specified in Section 74.502(d) of the FCC rules would need to be changed from its present 944 MHz to 932.5 MHz.

12. Also in the event that the Commission confirms that Aural BAS stations would be eligible to enter the lower 900 MHz POFS bands, then EIBASS proposes that all of the Part 101 technical standards for those bands, including the Section 101.115 minimum antenna standards requirements, be deemed to apply to any such Part 74 use.[7]

III. There Is No Need to Segment the 7 and 13 GHz TV BAS Bands

13. The Commission proposes to re-channel the 7 and 13 GHz bands, to give additional flexibility to TV BAS licensees. That is, to allow signal bandwidths of other than 25 MHz. In light of Paragraph 13 of the October 20, 2003, ET Docket 01-75 *Memorandum Opinion and Order* (MO&O), stating that it is acceptable to request a signal bandwidth that is less than the channel bandwidth, EIBASS sees no need for this proposed rule change. That is, broadcasters already have the option of licensing paths with bandwidths of other than 25 MHz, and the proposed segmentation of the 7 and 13 GHz TV BAS bands, and the cluttering up of the Code of Federal Regulations (CFR) to tediously list a large number of arbitrarily chosen 400-kHz and 800-kHz segments, is unnecessary.

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[6] On June 18, 2010, EIBASS filed comments in support of RM-11605, so long as new POFS entrants to that band had a requirement to protect fixed-link TV BAS stations at 7,100–7,125 MHz (TV BAS Channel B10) and any nearby 7 GHz fixed ENG-RO sites.

[7] In this regard, EIBASS hopes that the Commission will at long last act on the September 14, 2005, SBE Petition for Rulemaking for minimum antenna standards for Part 74, Subpart E, 950 MHz Aural BAS stations.

14. At paragraph 18, the NPRM notes that in the upper 6 GHz POFS band, channel bandwidths of up to 30 MHz are allowed, whereas in the 7 and 13 GHz TV BAS bands the maximum allowable bandwidth is 25 MHz. Because of the preclusive effects that a 30-MHz channel overlay would have with the current 25-MHz wide TV BAS channels, EIBASS is opposed to allowing POFS links in the 7 or 13 GHz TV BAS bands with channel widths of greater than 25 MHz.

IV. EIBASS Agrees That the Time Has Come To Apply the POFS Minimum Capacity and Loading Requirements to Fixed-Link TV BAS Stations

15. The NPRM proposes to apply the Part 101 minimum capacity and loading requirements of Section 101.141 ("Microwave Modulation") to fixed-link TV BAS stations. EIBASS agrees; it is time to do this. This minimum payload capacities as a function of signal bandwidth specified in Section 101.141(a)(3) of the FCC rules should apply to all new fixed-link TV BAS stations, and also to all major-change modifications to existing TV BAS fixed-link stations. However, the requirement should not apply to currently licensed paths that are not being modified; that is, existing TV BAS fixed-link stations should be "grandfathered," so long as a major-change modification is not proposed.

16. Many Part 74 Inter City Relay (ICR) links are used to relay incoming ENG feeds from fixed ENG-RO sites back to a TV station's studio. When not being actively used for such relaying, these links may have only minimal link identification (ID) content. Just as it would be inappropriate to apply minimum capacity and loading requirements to mobile TV Pickup stations (since unlike fixed links they are not engineered paths, and do not have the benefit of being able to use large diameter antennas meeting at least FCC Category B criteria), EIBASS submits that the minimum capacity and loading requirement for ICR stations used in support of fixed ENG-RO sites should also be exempted. However, studio-to-transmitter links (STLs), or ICRs not used for relaying feeds from fixed ENG-RO sites, should be required to comply as described in the prior paragraph.

V. Adaptive Modulation

17. EIBASS wishes to compliment the Commission for declining to adopt a significant change to the POFS minimum capacity and loading requirement rule in the guise of a declaratory ruling, and to gently chide the Fixed Wireless Communications Coalition (FWCC) for attempting such an end-run of the regulatory process. The Commission is perfectly correct to note that the proper

forum for such a change is the rule making process, where all interested parties are provided proper notification and given the opportunity to comment.

18. EIBASS believes that it would be a mistake to allow an exemption to the minimum modulation efficiency requirements. As the NPRM notes, if the Commission were to allow lower modulation efficiencies during anomalous signal fading, it would then have to adopt rules defining that condition. As the Commission also notes, this raises a Section 101.217 "station log" issue, regarding whether microwave licensees "temporarily" dropping below a minimum modulation efficiency benchmark would have to maintain records documenting the "anomalous fading condition." And would it only be the Commission entitled to view those records, or other, potentially impacted microwave licensees?

19. EIBASS urges the Commission not to open this technical Pandora's Box. Besides, if the mechanism causing the "anomalous fading conditions" is what EIBASS suspects it is, monsoon-like rain (or blizzard snow) sufficient to overcome the fade margin of a properly engineered link at 12 GHz or above, the carrier is probably going away as well, and no kind of fiddling with modulation will save the link until the severe rain (or snow) condition abates. Changing rules to allow a wrong answer will not solve a problem; let the current rules stand.

VI. WSI Proposal (ET Docket 07-121)

20. EIBASS continues to object to the Wireless Strategies, Inc. (WSI) proposal for physically small, phased-array distributed radiating element (DRE) microwave antennas, and WSI's concept of "microwave white spaces." WSI claims that it has developed a physically small phased array DRE microwave antenna that meets FCC Category A antenna specifications, yet requests by the Society of Broadcast Engineers, Inc. (SBE) and the National Spectrum Management Association (NSMA) for credible proof of such performance have, as best EIBASS can tell, been ignored. Absent evidence to the contrary, EIBASS believes that DRE microwave antennas may not exist. While EIBASS is not doubting the ability of a phased array antenna to perform well when the cost of such an antenna is a secondary issue, such as for military applications, EIBASS questions whether a physically small phased array DRE antenna meeting FCC Category A, or even Category B, criteria will ever be a commercially practical product for POFS and TV BAS applications, where the cost of such an antenna would need to be comparable to the cost of a conventional parabolic dish antenna.

21. If WSI can produce repeatable pattern and gain measurements by an independent, recognized entity of its claimed DRE microwave antenna that demonstrate compliance with the

Commission's Category A or Category B minimum antenna requirements, EIBASS would be among the first to congratulate WSI for a technological break through. Thus, EIBASS raises no objection to the use of rule-compliant, physically small phased array microwave antennas, or any new antenna technology. What EIBASS objects to are WSI's non-credible and undocumented claims for its phased array microwave antenna.

22. Regarding the WSI claim of "microwave white spaces," also referred to as "concurrent coordination" or "auxiliary stations," this whole concept is flawed and bogus. First, WSI's assumption that it could make use of the supposed differences between the radiation pattern envelope (RPE) of existing, parabolic dish microwave antennas and the actual side lobes of such antennas is fundamentally flawed. EIBASS will not repeat here the multiple reasons why, since those reasons have been documented in prior EIBASS filings to the ET Docket 07-121 rulemaking.[8] NSMA[9] and SBE[10] have also filed comments to that rulemaking, making similar conclusions.

23. Second, the WSI proposal that microwave radiators placed at unspecified locations and heights supposedly in the RPE main beam "white space" of an existing and properly coordinated microwave path, that would cause no additional interference or preclusion, is so technically flawed as to be laughable. If a microwave radiator is at a different location and/or height as an existing, licensed, microwave link, then each and every such emitter would need its own frequency coordination study, meeting all Section 101.103(d) protocols for PCNs. The concept that one could some how "seed" multiple "low power" microwave emitters along an existing microwave path, with no increase in interference to other stations, is a fundamentally flawed and non-credible proposal, and one that the Commission should finally dispense with, once and for all.

24. Third, EIBASS believes that WSI is already attempting a back-door implementation of its "microwave white spaces" scheme, as evidenced by an October 15, 2010, PCN request[11] sent by Wireless Applications Corporation on behalf of OEM Communications LLC for a 9.0-km 11 GHz duplex path between Campbell and Cupertino, California (in the heart of ”silicon valley”), using what appear to be physically small DRE antennas supposedly made by OEM

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8 On November 30, 2009 and April 8, 2010.
9 On February 23, 2009; June 11, 2009; September 18, 2009; and May 21, 2010.
10 On July 19, 2007.
11 An earlier version of the PCN, dated July 1, 2010, had requested *both* HPOL and VPOL.

Communications,[12] "Model OEM-OC-1100A_0002." As shown by the attached Figure 1A, on the one hand the PCN claims an RPE precisely matching the values in Section 101.115(b) required for an 11 GHz band Category A microwave antenna. EIBASS notes that the PCN only provides the supposed radiation pattern envelope (RPE), and not any documentation of the actual side lobes generating the RPE. If this RPE is assumed correct, then the proposed transmitter output power (TPO) of 45.1 dBm (32.4 *watts*) gives an equivalent isotropic radiated power (EIRP) of 84.7 dBm. This would then give a receive carrier level (RCL) of -8.4 dBm, and a fade margin of 62.6 dB based upon the indicated -71 dBm threshold for the proposed Explore Air microwave receiver when using a 40-MHz wide, 64 QAM digital signal. That's an absurd fade margin for a 9-km path. The -8.4 dBm RCL would likely cause brute force overload to the receiver. Finally, such a high EIRP would violate Section 101.113(a) of the FCC rules, which requires an applicant to only request "the minimum amount of power necessary to carry out the communications desired."

25. However, the PCN also includes plots of eight other RPEs supposedly also for the OEM Model OEM-OC-1100A microwave antenna, all with nulls in the main beam; see the attached Figures 1C and 1B. So which is it? If it is the suppressed main beam RPEs, then the main beam gain is not 39.6 dBi as claimed, but rather only 8.9 dBi, which fails to meet the minimum gain of 38 dBi for an 11 GHz band Category A antenna. Further, the half power beam width (HPBW) is then 20.4°, far in excess of the maximum HPBW of 2.2° allowed for an 11 GHz band Category A antenna.

26. If it is the nulled main beam RPE that is really being proposed, then EIBASS believes that the real purpose of this PCN is to create the highest possible "microwave white spaces" footprint, for OEM Communications to then try to implement the WSI-proposed scheme of point-to-multipoint microwave paths at unspecified locations within the coordinated station's footprint; that is, a Broadband Radio Service (BRS) model, not a POFS point-to-point model. But as noted in the previous paragraph, if the nulled-main-beam is really the proposed RPE, then the main beam EIRP is really just 54.0 dBm, reducing the apparently hoped for microwave white space footprint by 30.7 dB.

27. Additionally, EIBASS can find no evidence that such antennas are commercially available. Thus, in EIBASS' view this second-attempt PCN is self-contradictory and for either version of

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[12] Wireless Applications Corporation, 111-108th Avenue NE, Suite 160, Bellevue, WA 98004; telephone 425/643-5000. PCN dated October 15, 2010, number CAOEMC2010-06. A similar PCN for an 11 GHz, 7.6-km duplex path between Campbell, CA and Blossom Hill, CA, again specifying a TPO of 32.4 watts and an EIRP of 84.7 dBm, was also filed; number CAOEMC2010-07.

the mystery OEM antenna has major violations of the Commission's Part 101 rules applying to POFS stations. .

28. EIBASS understands that at least one governmental entity had objected to the initial, July 1, 2010, PCN, and expects an objection to the October 15 PCN, as well. If an actual application gets filed for this proposed path, EIBASS hopes that it will be given close scrutiny by the Commission to ensure that all submitted information is truthful and accurate, as required by Title 18 United States Code, Section 1001.

VII. No Relaxation To The Commission's Category A or Category B Minimum Antenna Standards

29. EIBASS urges the Commission not to relax its current Category A or Category B minimum antenna standards. Such standards are an important part of spectrum efficiency. While EIBASS is now on record[13] in the WT Docket 07-54 rulemaking as not objecting to allowing POFS stations in frequency congested areas to use Category B rather than Category A antennas, with the caveats that such links would 1) only be protected on the basis of a Category A receiving antenna and 2) could be required to upgrade to a Category A transmitting antenna, at its own expense, if a showing is subsequently made that the use of a Category B transmitting antenna is precluding the establishment of a new path, this is far different from any relaxation of the minimum antenna standards. EIBASS sees no justification for that approach.

VIII. Summary

30. EIBASS supports most of the changes proposed in the WT Docket 10-153 NPRM/NOI, and can even live with opening the 7 and 13 GHz TV BAS bands to POFS, so long as newcomer POFS links are required to additionally protect fixed ENG-RO sites in those bands. It is the WSI proposal for "microwave white spaces/concurrent frequency coordination" and unproven and apparently non-commercially available physically small DRE microwave antennas allegedly meeting FCC Category A antenna specifications that EIBASS strenuously opposes, and urges the Commission not to be fooled by this equivalent of cold fusion for microwave stations. EIBASS respectfully reminds the Commission that at the heart of its proposals is our premise that Rules that do not conform to good engineering practice should not be adopted (because they will fail), and Rules that do conform should be left alone.

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[13] EIBASS *ex parte* comments dated April 8, 2010.

List of Figures

31. The following figure has been prepared as a part of these WT Docket 10-153 comments:

Respectfully submitted,

/s/ Dane E. Ericksen, P.E., CSRTE, 8-VSB, CBNT
EIBASS Co-Chair
Hammett & Edison, Inc., Consulting Engineers
Sonoma, CA

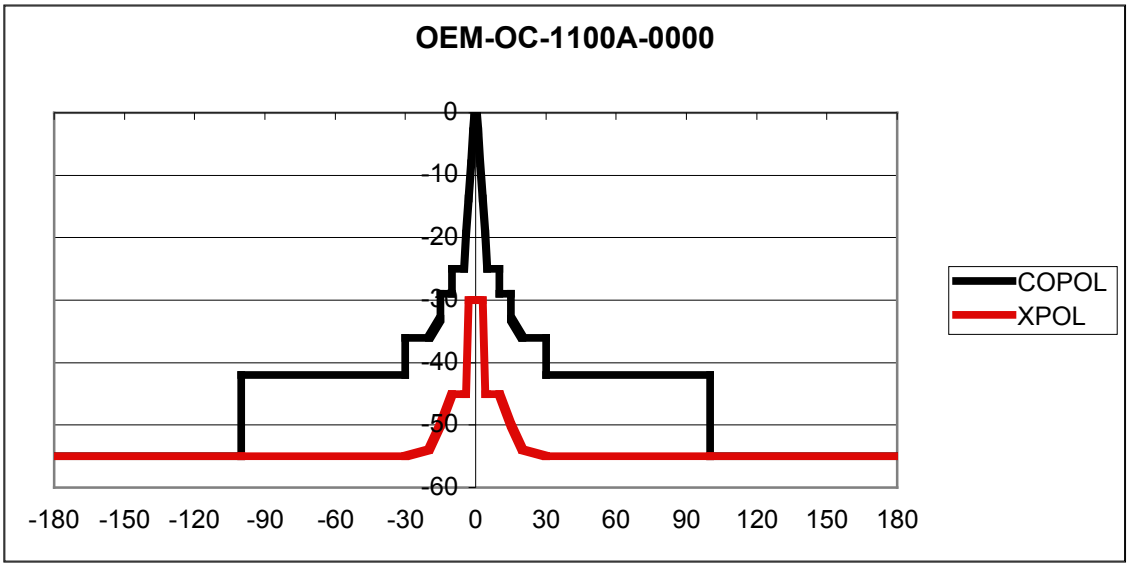
/s/ Richard A. Rudman, CPBE
EIBASS Co-Chair
Remote Possibilities
Santa Paula, CA

October 25, 2010

EIBASS
18755 Park Tree Lane
Sonoma, CA 94128
707/996-5200
dericksen@h-e.com

EIBASS Comments: WT Docket 10-153, BAS Flexibility

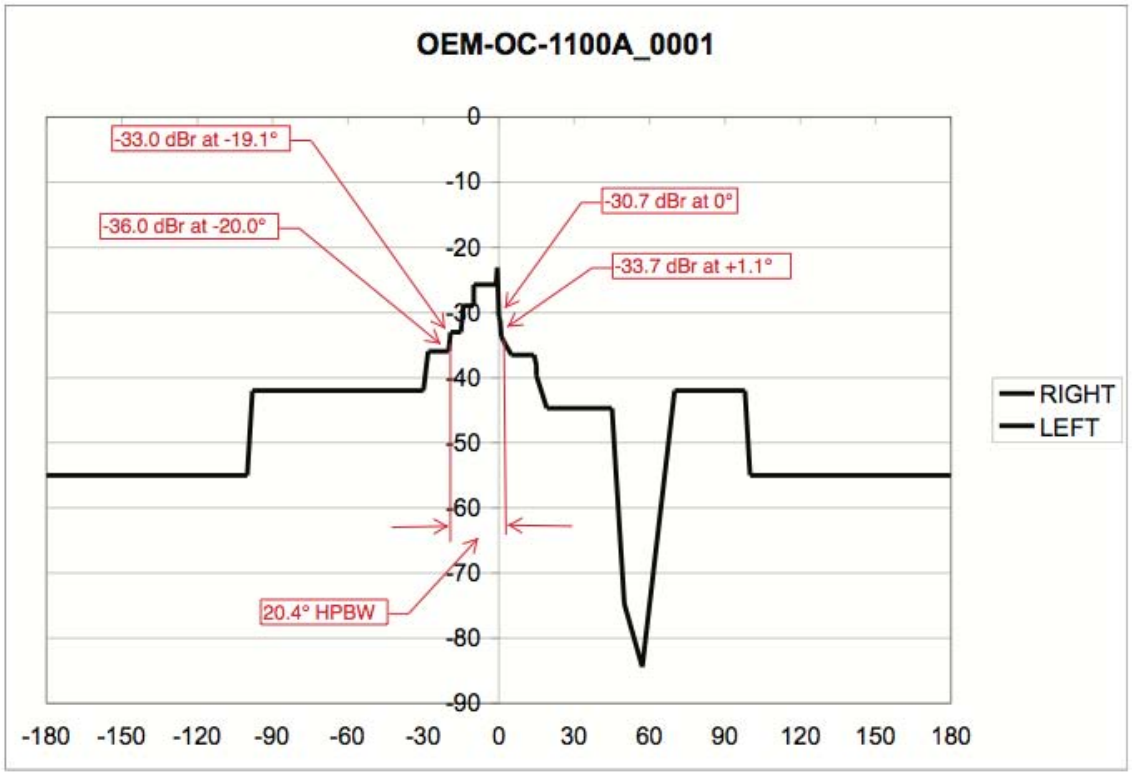
Claimed RPEs for OEM Model OEM-OC-1100A Microwave Antenna



One of the claimed radiation pattern envelopes (RPEs) for the OEM Model OEM-OC-1100A microwave antenna. The Excel data file provided with the PCN describes the antenna as a "smart grid antenna." From the October 15, 2010, OEM Communications, LLC prior coordination notice (PCN), Number CAOEMC2010-06.

EIBASS Comments: WT Docket 10-153, BAS Flexibility

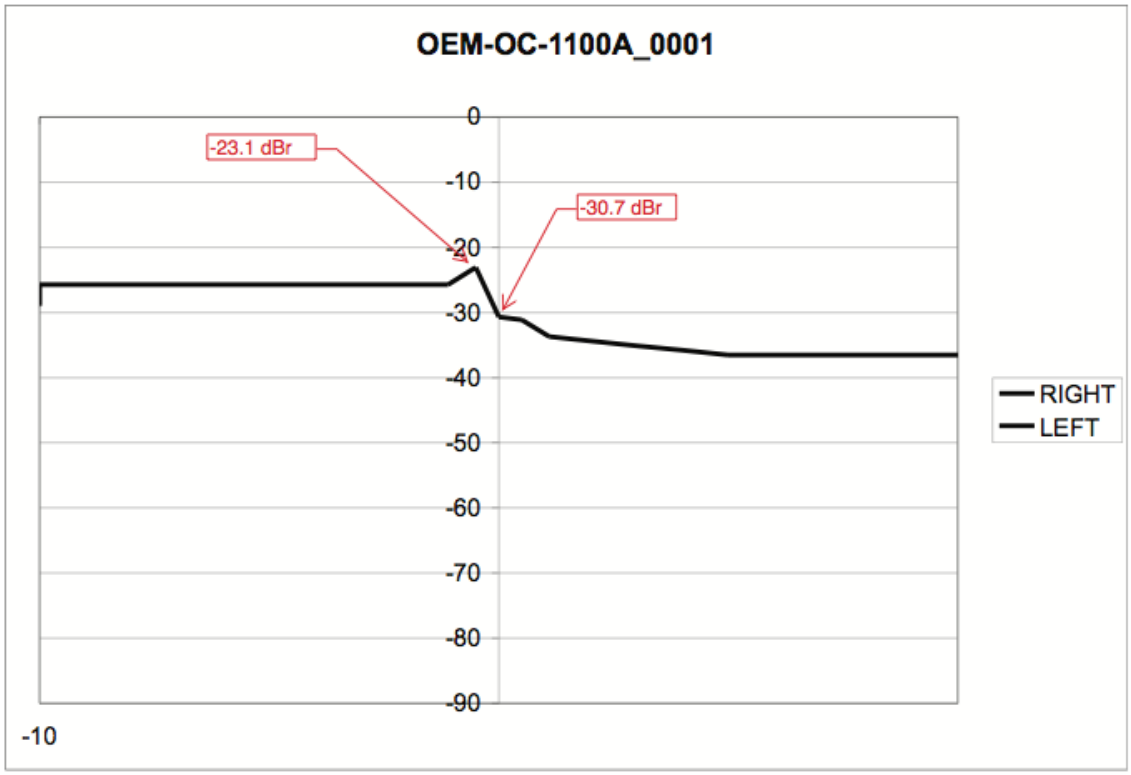
Claimed RPEs for OEM Model OEM-OC-1100A Microwave Antenna



Contradictory claimed RPE for a "suppressed main beam" OEM Model OEM-OC-1100A "smart grid" microwave antenna. The corresponding half-power beam width is 20.4°. Again from the October 15, 2010, OEM Communications, LLC PCN. Red annotations added by EIBASS.

EIBASS Comments: WT Docket 10-153, BAS Flexibility

Claimed RPEs for OEM Model OEM-OC-1100A Microwave Antenna



Expanded plot of contradictory claimed RPE for a "suppressed main beam" OEM Model OEM-OC-1100A "smart grid" microwave antenna.. Again from the October 15, 2010, OEM Communications, LLC PCN. Red annotations again added by EIBASS.